

**$D_{sJ}^*(2860)^\pm$**  $I(J^P) = 0(?)$ 

## OMITTED FROM SUMMARY TABLE

Observed by AUBERT,BE 06E and AUBERT 09AR in inclusive production of  $DK$  and  $D^*K$  in  $e^+e^-$  annihilation.  $J^P$  is natural.

<b><math>D_{sJ}^*(2860)^\pm</math> MASS</b>				
<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>2863.2<sup>+4.0</sup><sub>-2.6</sub> OUR AVERAGE</b>				
[2862 <sup>+5.4</sup> <sub>-2.8</sub> MeV OUR 2012 AVERAGE]				
2866.1 $\pm$ 1.0 $\pm$ 6.3	36k	<sup>1</sup> AAIJ	12AU LHCb $p p \rightarrow (DK)^+X$ at 7 TeV	
2862 $\pm$ 2 $\pm$ 5	3122	<sup>2</sup> AUBERT	09AR BABR $e^+e^- \rightarrow D^{(*)}KX$	
• • • We do not use the following data for averages, fits, limits, etc. • • •				
2856.6 $\pm$ 1.5 $\pm$ 5.0		<sup>3</sup> AUBERT,BE 06E BABR	$e^+e^- \rightarrow DKX$	
1 From the combined fit of the $D^+ K_S^0$ and $D^0 K^+$ modes in the model including the $D_{s2}^*(2573)^+$ , $D_{s1}^*(2700)^+$ and spin-0 $D_{sJ}^*(2860)^+$ .				
2 From simultaneous fits to the two $DK$ mass spectra and to the total $D^*K$ mass spectrum.				
3 Superseded by AUBERT 09AR.				

<b><math>D_{sJ}^*(2860)^\pm</math> WIDTH</b>				
<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>58 <math>\pm</math>11 OUR AVERAGE</b>		Error includes scale factor of 2.2. [48 $\pm$ 7 MeV OUR 2012 AVERAGE]		
69.9 $\pm$ 3.2 $\pm$ 6.6	36k	<sup>4</sup> AAIJ	12AU LHCb $p p \rightarrow (DK)^+X$ at 7 TeV	
48 $\pm$ 3 $\pm$ 6	3122	<sup>5</sup> AUBERT	09AR BABR $e^+e^- \rightarrow D^{(*)}KX$	
• • • We do not use the following data for averages, fits, limits, etc. • • •				
47 $\pm$ 7 $\pm$ 10		<sup>6</sup> AUBERT,BE 06E BABR	$e^+e^- \rightarrow DKX$	
4 From the combined fit of the $D^+ K_S^0$ and $D^0 K^+$ modes in the model including the $D_{s2}^*(2573)^+$ , $D_{s1}^*(2700)^+$ and spin-0 $D_{sJ}^*(2860)^+$ .				
5 From simultaneous fits to the two $DK$ mass spectra and to the total $D^*K$ mass spectrum.				
6 Superseded by AUBERT 09AR.				

<b><math>D_{sJ}^*(2860)^\pm</math> DECAY MODES</b>				
Mode				
$\Gamma_1$	$DK$			
$\Gamma_2$	$D^0 K^+$			
$\Gamma_3$	$D^+ K_S^0$			
$\Gamma_4$	$D^* K$			
$\Gamma_5$	$D^{*0} K^+$			
$\Gamma_6$	$D^{*+} K_S^0$			

<b><math>D_{sJ}^*(2860)^\pm</math> BRANCHING RATIOS</b>				
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b><math>1.10 \pm 0.15 \pm 0.19</math></b>	3122	<sup>7</sup> AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$
<sup>7</sup> From the average of the corresponding ratios with $D^{(*)0} K^+$ and $D^{(*)+} K_S^0$ .				
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b><math>\Gamma(D^* K)/\Gamma(DK)</math></b>				<b><math>\Gamma_4/\Gamma_1</math></b>
<b><math>1.10 \pm 0.15 \pm 0.19</math></b>	3122	<sup>7</sup> AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$
<sup>7</sup> From the average of the corresponding ratios with $D^{(*)0} K^+$ and $D^{(*)+} K_S^0$ .				
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b><math>\Gamma(D^{*0} K^+)/\Gamma(D^0 K^+)</math></b>				<b><math>\Gamma_5/\Gamma_2</math></b>
<b><math>1.04 \pm 0.17 \pm 0.20</math></b>	2241	<sup>8</sup> AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$
<sup>8</sup> From the $D^{*0} K^+$ and $D^0 K^+$ , where $D^{*0} \rightarrow D^0 \pi^0$ .				

NODE=M196

NODE=M196M

NODE=M196M

NEW

NODE=M196M;LINKAGE=AA

NODE=M196M;LINKAGE=AB

NODE=M196M;LINKAGE=AU

NODE=M196W

NODE=M196W

NEW

NODE=M196W;LINKAGE=AA

NODE=M196W;LINKAGE=AB

NODE=M196W;LINKAGE=AU

NODE=M196215;NODE=M196

DESIG=1

DESIG=2

DESIG=3

DESIG=4

DESIG=5

DESIG=6

NODE=M196225

NODE=M196R01

NODE=M196R01

NODE=M196R01;LINKAGE=AU

NODE=M196R02

NODE=M196R02

NODE=M196R02;LINKAGE=AU

$\Gamma(D^{*+} K_S^0)/\Gamma(D^+ K_S^0)$		$\Gamma_6/\Gamma_3$			
VALUE	EVTS	DOCUMENT ID	TECN	COMMENT	
<b>• • • We do not use the following data for averages, fits, limits, etc. • • •</b>					
1.38±0.35±0.49	881	<sup>9</sup> AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$	
<sup>9</sup> From the $D^{*+} K_S^0$ and $D^+ K_S^0$ , where $D^{*+} \rightarrow D^+ \pi^0$ .					

NODE=M196R03  
NODE=M196R03

NODE=M196R03;LINKAGE=AU

NODE=M196

REFID=54735  
REFID=53135  
REFID=51512

## $D_{sJ}^*(2860)^\pm$ REFERENCES

AAIJ	12AU	JHEP 1210 151	R. Aaij <i>et al.</i>	(LHCb Collab.)
AUBERT	09AR	PR D80 092003	B. Aubert <i>et al.</i>	(BABAR Collab.)
AUBERT,BE	06E	PRL 97 222001	B. Aubert <i>et al.</i>	(BABAR Collab.)